

REMARKS

As an initial matter, Applicants reaffirm the election to prosecute the Group I method claims, *i.e.*, claims 1-24. Thus, claims 1-24 remain pending in the present application. Additionally, Applicants respectfully request the Examiner to reconsider the restriction requirement and allow prosecution of the Group III claims and the Group IV claims.

Claims 29-41 (*i.e.*, the Group IV claims) are Beauregard claims that have similar elements as that of claims 1-24, *i.e.*, Group I claims. Applicants concede that the Group IV claims are not process claims, but are device claims. However, the Group IV claims are related to the Group I claims since the Group IV claims recite a device that call for performing processes that are closely related to the elements recited in Group I claims. Although the preambles for claims 29-41 are different, the limitations of claims 29-41 are similar to those of claims 1-24. Therefore, Applicants respectfully assert that claims 29-41 (*i.e.*, the Group IV claims), be examined with the Group I claims, as doing so would not create an undue burden upon the Office.

Additionally, claim 28 (*i.e.*, Group III) is a means-plus-function claim that is related to elements that are recited in claim 1 (from the Group I claims). MPEP § 806.05(e) sets forth requirements for restricting a process and an apparatus for its practice. Claim 28 is a claim to “means” for practicing the process claims set forth in the Group I claims. According to MPEP § 806.05(e), a “means” claim is a linking claim and must be examined with the elected invention. If it is ultimately allowed, rejoinder is required. See MPEP § 809.04. Claim 28 satisfies the criteria set forth in MPEP 806.05(e) as a linking claim, and it therefore is entitled to examination

with the elected Group I claims. If it is ultimately allowed, rejoinder is required. See MPEP § 809.04. Applicants hereby respectfully request that claim 28 (*i.e.*, Group III) be included in the elected Group I claims.

The Examiner rejected claims 1 through 24 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,408,220 B1 (*Nulman*). Applicants respectfully traverse this rejection.

Applicants respectfully assert that *Nulman* does not teach, disclose, or suggest all of the elements called for by claim 1 of the present invention. *Nulman* is directed to an SPC environment for acquiring metrology data and implementing control of production runs. *Nulman* discloses selecting the status of a chamber of a processing tool, which may include an on-line in standby 326, on-line in-process 328, or off-line 330 (see col. 7, line 52-col. 8, line 13). However, *Nulman* does not disclose cascading a pre-process metrology acquisition process relating to a semiconductor workpiece (*e.g.*, semiconductor wafer) while processing another semiconductor workpiece, as called for by claim 1 of the present invention. The Examiner uses the disclosure in *Nulman* that indicates deriving control limits statistically during processing and/or in-process product parameters, to show a pre-process metrology (see col. 6, lines 52-67). However, statistically analyzing data relating to processing and/or in-process product parameters does not equate to cascading pre-process metrology data acquisition with processing of another semiconductor workpiece, which is called for by claim 1 of the present invention.

Nulman is directed to modifying control limits based upon statistical process control analysis used to determine that a process is within the control limits. *Nulman* does not disclose cascading a process flow to acquire pre-process data from a second workpiece, while processing

a first workpiece. *Nulman* discloses on-line in-process or off-line status of a chamber, acquiring metrology results 358 from a chamber, and acquiring inputs from an MES and an SPC environment 250, 220, (see col. 7, lines 52-67, col. 8, lines 4-13, col. 8, lines 44-47) but does not disclose pre-process metrology data, much less cascading pre-process data with processing of a semiconductor workpiece. There is no disclosure in *Nulman* that indicates cascading of pre-process data with processing of semiconductor workpieces, as called for by claim 1 of the present invention. The various citations referenced by the Examiner, along with all other portions of *Nulman*, do not disclose cascading the processes of acquiring pre-processing data, during at least a portion of the time period in which another workpiece is being processed. Therefore, *Nulman* does not teach, disclose, or suggest all of the elements of claim 1 of the present invention. Therefore, claim 1 is allowable for at least the reasons cited above. Additionally, independent claim 14, which has similar elements as that of claim 1, along with the additional element of post-processing data, is also allowable for at least the reasons cited above.

Independent claims 1 and 14 are allowable for at least the reasons stated above. Dependent claims 2-13 and claims 15-24, which depend from claims 1 and 14, respectively, are also now considered to be patentable in light of the above-presented arguments.

In light of the arguments presented above, reconsideration of the present application is respectfully requested. In light of the arguments presented above, Applicants respectfully assert that claims 1-9 are allowable. Additionally, if the Examiner reconsiders the restriction requirement and examines Group II and Group III claims, Applicants respectfully assert that claims 28 and 29-41 are also allowable for at least the reasons cited above. In light of the arguments presented above, a Notice of Allowance is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Houston, Texas telephone number (713) 934-4069 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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23720

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